# RPM/UPS Interface Card

# User's Manual

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**NOTICE:** This equipment has been tested and found to comply with the limits for a "Class A" digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instruction manual, may cause interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at the user's own expense.

This digital apparatus does not exceed the "Class A" limits for radio noise emissions from digital apparatus set out in the Radio interference regulations of the Canadian Department of Communications.

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**Note: Notes contrast from the text to emphasize their importance.**

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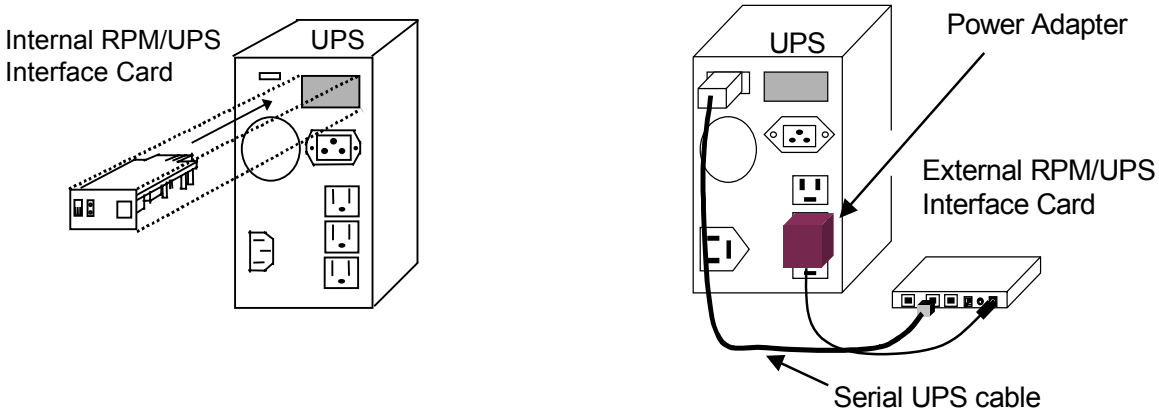
# Introduction

A UPS can be configured with an internal or external RPM/UPS Interface Card; this RPM/UPS Interface Card is then connected to the iLink Port on the Remote Power Manager (RPM). The RPM/UPS Interface Card allows the user to interface between the RPM and UPS. When the selected power event occurs; the UPS via the RPM/UPS Interface Card will send a signal to the RPM, which in turn will send a signal to the connected Windows NT/2000 server to perform a safe and logical shutdown. The RPM/UPS Interface Card allows the user to control and view the status of the UPS and the RPM via one Computer Interface/SNMP Card. The complete RPM/UPS Interface Card package includes: Hardware, iLink Cable and a User's Manual.

**NOTE:** The user must setup the RPM before performing the installation or setup procedure for the RPM/UPS Interface Card (see the setup procedure in the RPM User's Manual and SNMP-32L User's Manual).

**NOTE:** The Power Management Software for Windows NT/2000 Server must be setup for the safe and logical shutdown.




## RPM/UPS Interface Card Features

- **Internet ready** — It supports both SNMP and HTTP protocols (via the Computer Interface/SNMP Card) and the user can use SNMP manager or Web browser to monitor the UPS or RPM through a network.
- **Multiple OS support**—Via the Computer Interface/SNMP Card. As long as there is Network Management software present.
- **Remote monitoring**—Allows the monitoring of one UPS and Multiple RPMs (via the Computer Interface/SNMP Card) from a remote workstation (Web browser or NMS).

## RPM/UPS Interface Card Package

The contents of your package are:

| Internal Package | External Package |
|---|---|
| ☐ RPM/UPS Interface Card | ☐ External Adaptor Box |
| ☐ RJ11 to RJ11 iLink Cable | ☐ Power Adaptor |
| ☐ User's Manual | ☐ DB9 Male-to-Female Serial Cable |
| ☐ Warranty Card | ☐ RPM/UPS Interface Card |
| | ☐ RJ11 to RJ11 iLink Cable |
| | ☐ Two Retaining Screws |
| | ☐ User's Manual |
| | ☐ Warranty Card |

**Figure 1- RPM/UPS Interface Card**

Figure 1 shows the RPM/UPS Interface Card's Status LEDs, and RJ11 iLink Port Connector.

**Status LEDs** – Two LED indicators: The first LED (red) indicates power. The second LED (green) indicates connection and it flashes when receiving or sending data.

**RJ11 Connector**— Connect the iLink Cable to the RPM/UPS Interface Card, then to the iLink Port on the RPM.

# *Installation*

This section describes the installation of the RPM/UPS Interface Card into the UPS and connecting to the RPM.

## Internal RPM/UPS Interface Card

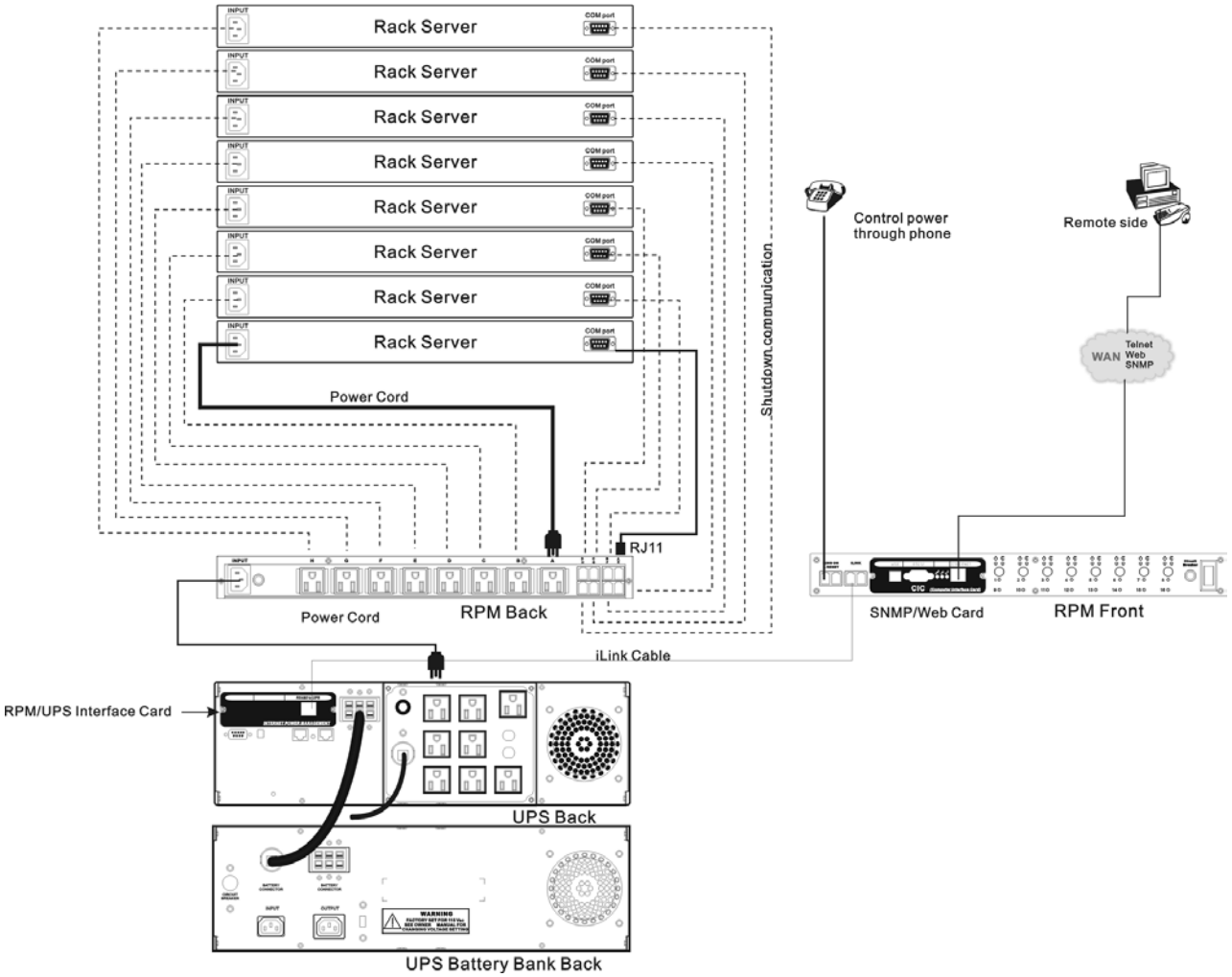
**NOTE:** The user must setup the RPM before performing the installation or setup procedure for the RPM/UPS Interface Card (see the setup procedure in the RPM User's Manual).

1. Turn off all the equipment that is plugged into the RPM and UPS.
2. Turn off the RPM and unplug the RPM's power cord from the UPS's output receptacle.
3. Turn off the UPS and unplug the UPS's power cord from the AC wall outlet.
4. Remove the two retaining screws from the option slot's cover plate (rear panel of the UPS).
5. Remove the option slot's cover plate (rear panel of the UPS).
6. Insert the RPM/UPS Interface Card into the option slot.
7. Re-install the two retaining screws.
8. Attach one end of the iLink Cable (provided) to the RJ11 iLink Port on the RPM/UPS Interface Card.
9. Attach the other end of the iLink Cable to the iLink Port on the RPM.
10. Plug the RPM's power cord into the UPS's Battery Powered output receptacle.
11. Plug the UPS's power cord into the AC wall outlet.
12. Turn on the UPS and the RPM.
13. Turn on all the equipment that is plugged into the UPS and RPM.
14. The installation procedure is complete. The RPM/UPS Interface Card is ready to be setup (see Setup Procedure).

## External RPM/UPS Interface Card

**NOTE:** The user must setup the RPM before performing the installation or setup procedure for the RPM/UPS Interface Card (see the setup procedure in the RPM User's Manual).

1. Turn off all the equipment that is plugged into the RPM and UPS.
2. Turn off the RPM and unplug the RPM's power cord from the UPS's output receptacle.
3. Turn off the UPS and unplug the UPS's power cord from the AC wall outlet.
4. Plug the power adaptor's connector into the connector, on the external adaptor box, labeled "Input".
5. Plug the DB9 Male to Female serial cable into the connector, on the external adaptor box, labeled "To UPS".
6. Plug the other end of the DB9 Male to Female serial cable into the Serial Port on the UPS (rear panel of the UPS).
7. Plug the power adaptor into one of the Battery Powered output receptacles of the UPS.
8. Insert the RPM/UPS Interface Card into the option slot on the external adaptor box.
9. Install the two retaining screws (provided).
10. Attach one end of the iLink Cable (provided) to the RJ11 iLink Port on the RPM/UPS Interface Card.
11. Attach the other end of the iLink Cable to the iLink Port on the RPM.
12. Plug the RPM's power cord into the UPS's Battery Powered output receptacle.
13. Plug the UPS's power cord into the AC wall outlet.
14. Turn on the UPS and the RPM.
15. Turn on all the equipment that is plugged into the UPS and RPM.
16. The installation procedure is complete. The RPM/UPS Interface Card is ready to be setup (see Setup Procedure).




Typical wiring scheme for the RPM/UPS Interface Card.

# Setup Procedure

This section will guide you through the Setup Procedure for the RPM/UPS Interface Card.

**NOTE:** The user must setup the RPM before performing the installation or setup procedure for the RPM/UPS Interface Card (see the setup procedure in the RPM User's Manual and SNMP-32L User's Manual).

**NOTE:** The user must complete the appropriate Installation procedure of the RPM/UPS Interface Card before proceeding with the Setup Procedure for the RPM/UPS Interface Card.

The Ethernet cable is connected to the RPM. The iLink Cable is connected to the RPM and the UPS. The UPS and RPM are on.

The RPM can be set-up to perform a safe and logical shutdown for the connected equipment when the selected event happens to the UPS. The user selects an event for which they want the RPM to signal the connected equipment to perform a safe and logical shutdown.

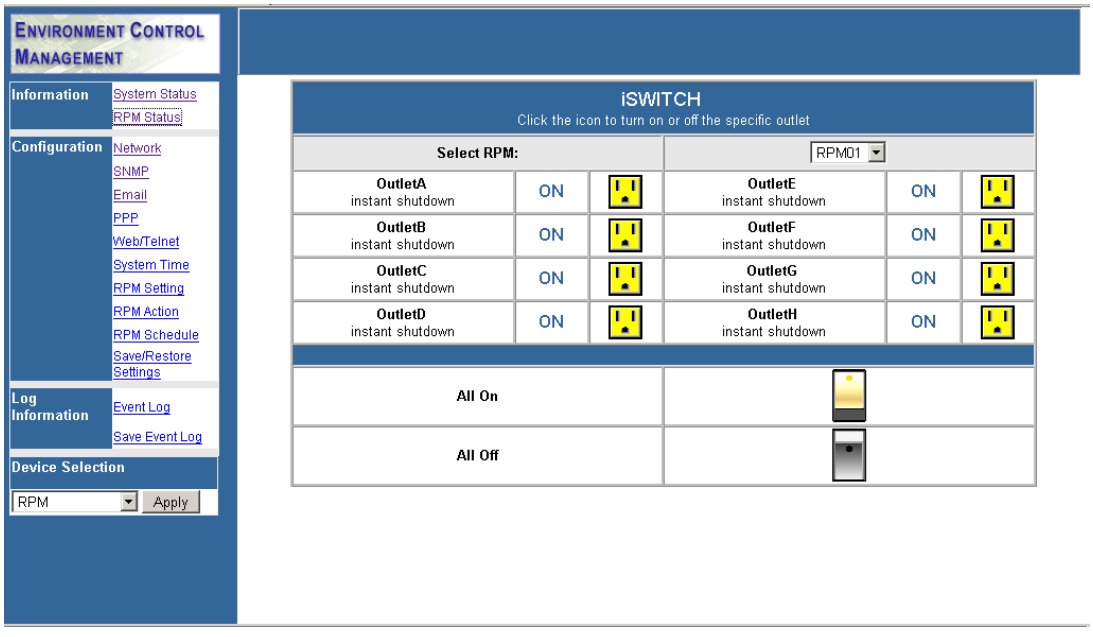
**NOTE:** The Power Management Software for Windows NT/2000 Server must be setup for the safe and logical shutdown (see the RPM User's Manual).

The following example explains how to set-up the RPM/UPS to turn off the RPM's Outlet "A" when the UPS reaches a Low Battery condition and to turn the RPM's outlet "A" back on once the AC power for the UPS has been restored. If the AC power to the UPS is restored before the UPS reaches a Low Battery Condition the above actions will be aborted.

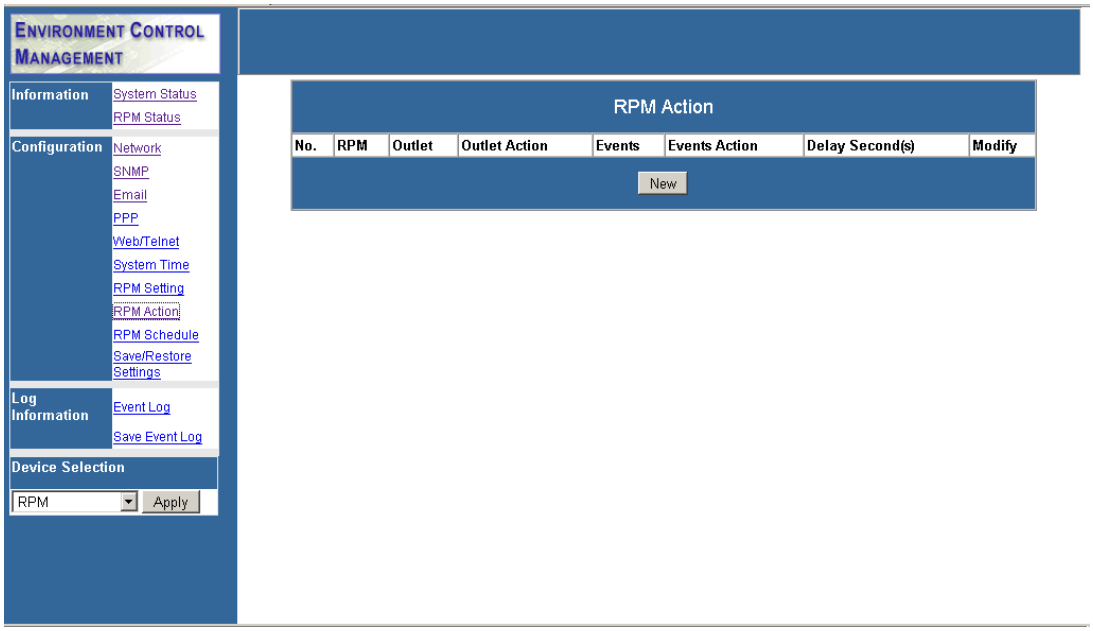
1. Startup a Web browser.
2. Type in your IP Address.
3. Enter the User Name and the Password (Not required). If a User Name or a Password was not entered in the Set-Up Procedure SNMP-32L, then click OK.

**NOTE:** There is no default User Name or Password.

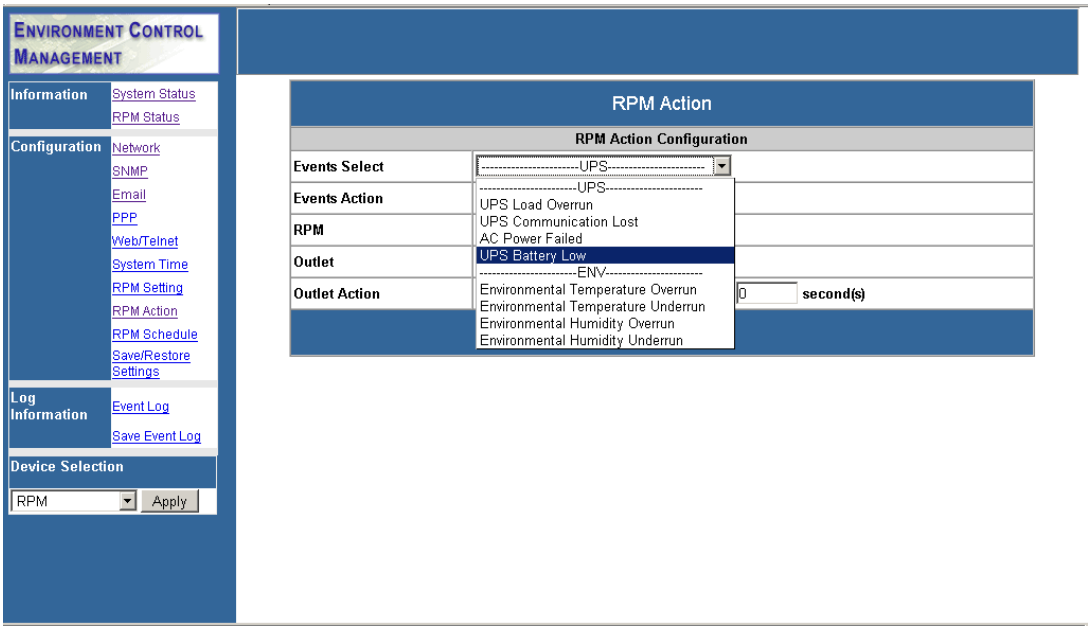
The user can view the status and control the RPM from these Web pages. See the RPM User's Manual and the SNMP-32L User's Manual for more details concerning the RPM Web pages.



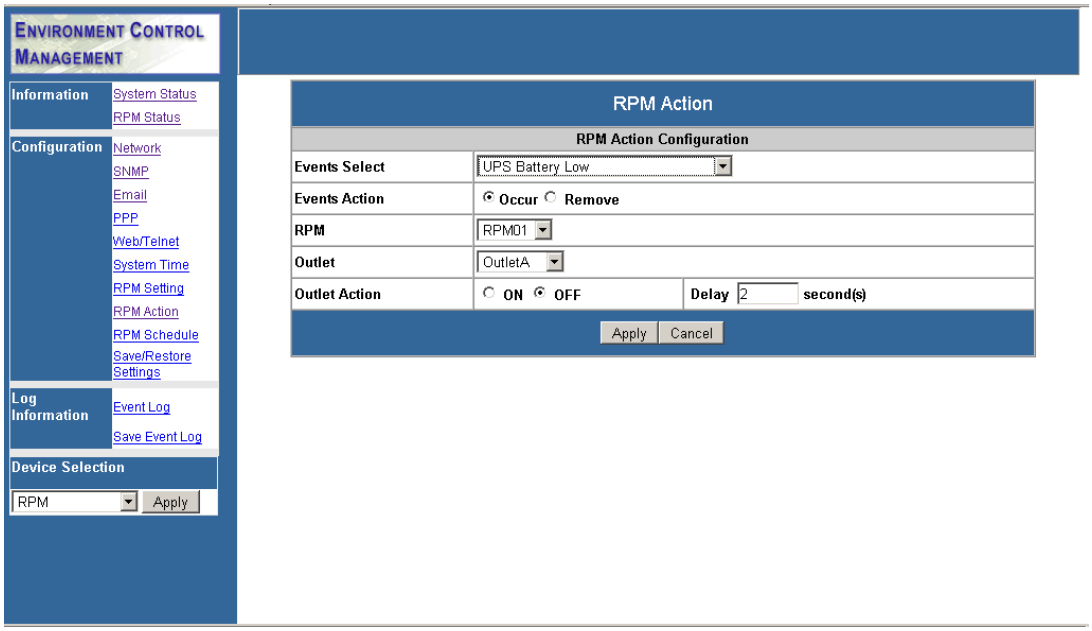

4. This screen informs the user the status of the RPM. Select and enable the appropriate RPM (RPM01-RPM16) to perform the action. Next, select "RPM Action".



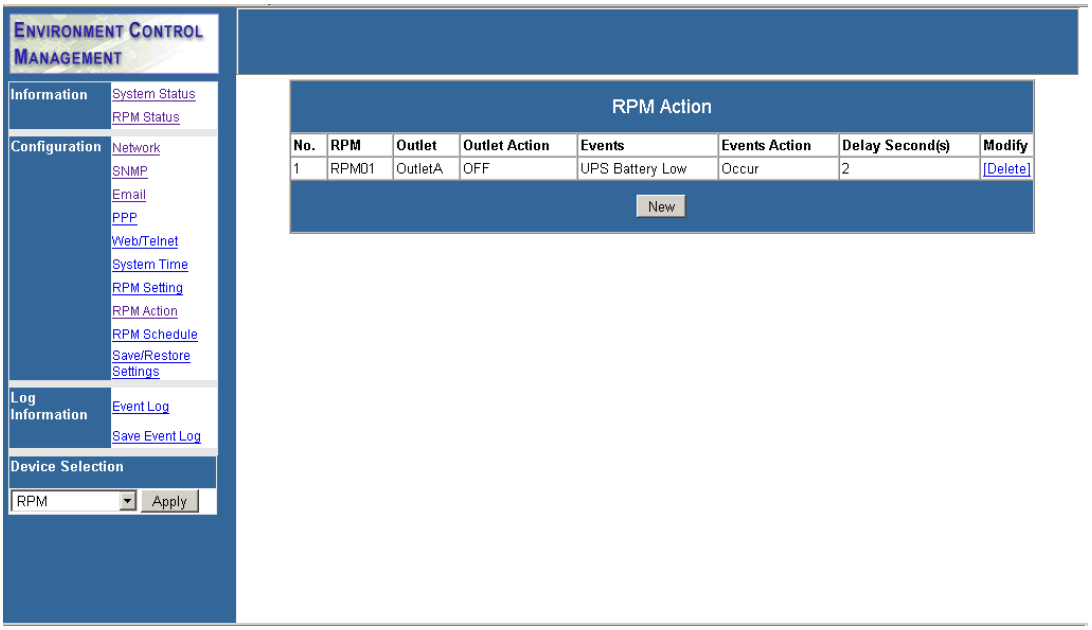

5. Select “New”.



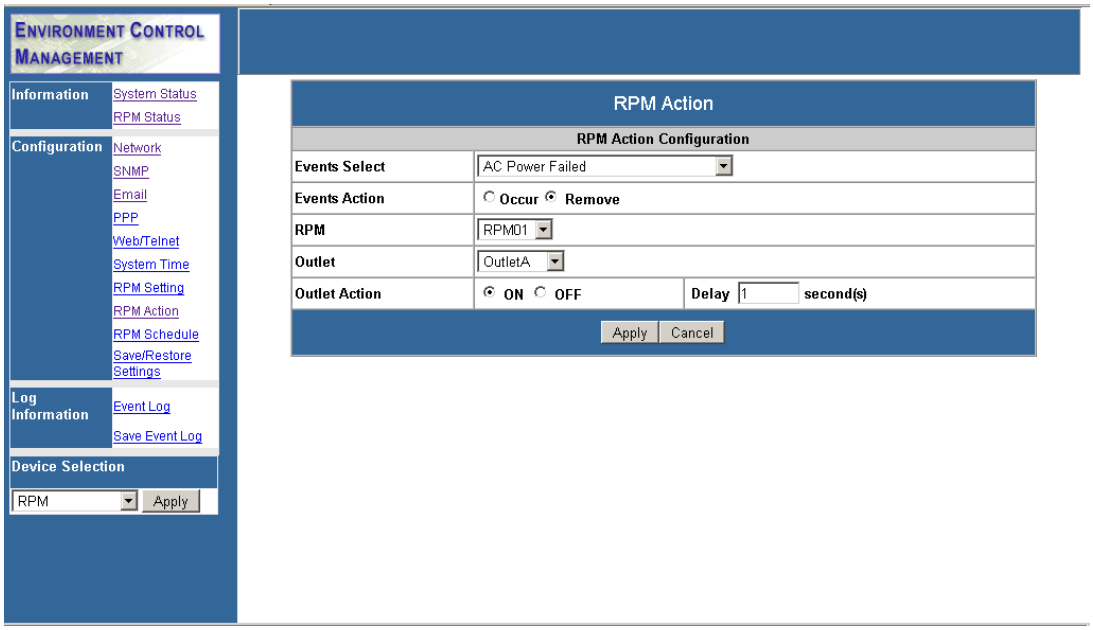

6. Events Select: select an event (UPS Battery Low) for the RPM to perform an action.




7. Events Action: Select “Occur” for when the Selected event happens or select “Remove” for when the Selected event is removed (select “Occur”).
   RPM: Select which RPM to perform the action (select “RPM01”).
   Outlet: Select which outlet on the RPM you want the action performed on (select “Outlet A”).
   Outlet Action: Select what action you want the selected outlet to perform, turn ON or turn OFF (select “OFF”). Then click on “Apply”. When the RPM01 detects that the UPS has reached a Low Battery Condition, the RPM will turn OFF Outlet A.




8. By clicking on “Delete” will cancel this RPM Action.
9. Click on “New”.



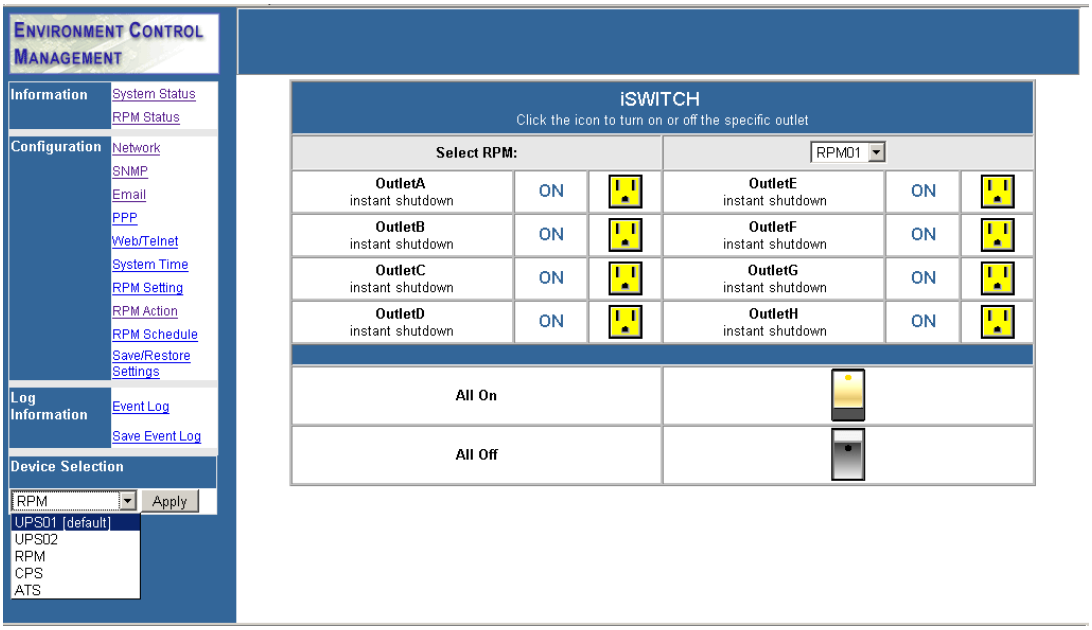

10. Events Select: Select AC Power Failed".
    Events Action: Select "Remove" for when the Selected event has been removed or select "Occur" for when the Selected event happens (select "Remove").
    RPM: Select which RPM to perform the action (select "RPM01").
    Outlet: Select which outlet on the RPM you want the action performed on (select "Outlet A").
    Outlet Action: Select what action you want the selected outlet to perform, turn ON or turn OFF (select "ON"). Then click on "Apply". When the UPS detects that the AC power has returned it will signal RPM01 that the AC power has returned and then RPM01 will turn ON Outlet A.

**NOTE:** The SNMP-32L card will automatically perform the configured action, the Web browser may be closed at this time. The SNMP-32L card must be left on the UPS Web pages before closing the Web browser, so that the SNMP-32L card will automatically perform the configured action.

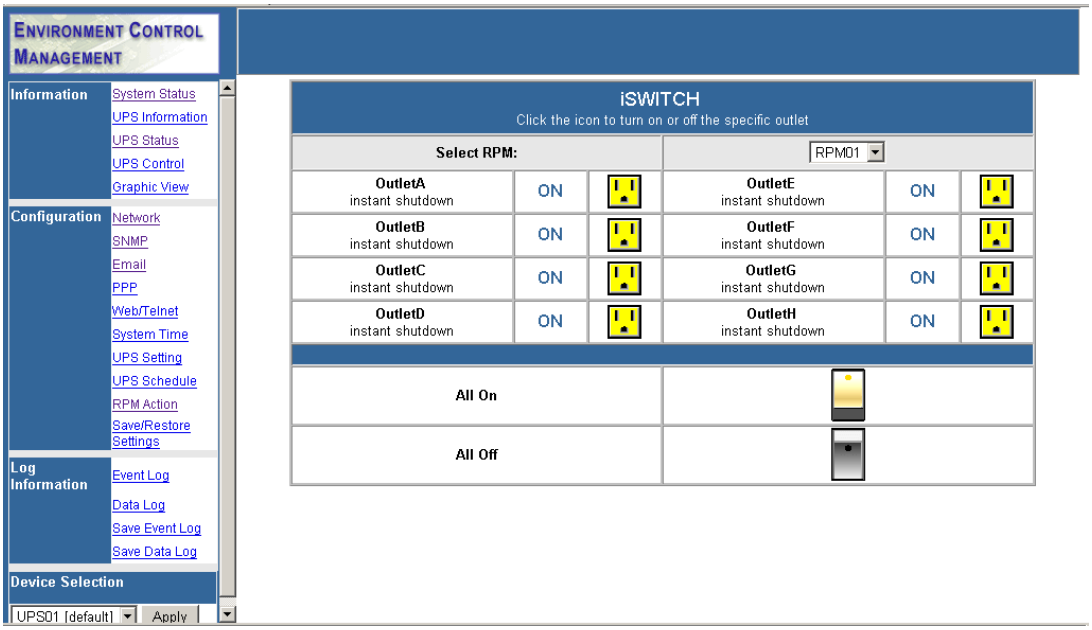
# Switching from the RPM Web Pages to the UPS Web Pages

The RPM/UPS Interface Card allows the user to control and view the status of the UPS and the RPM via one Computer Interface/SNMP Card.

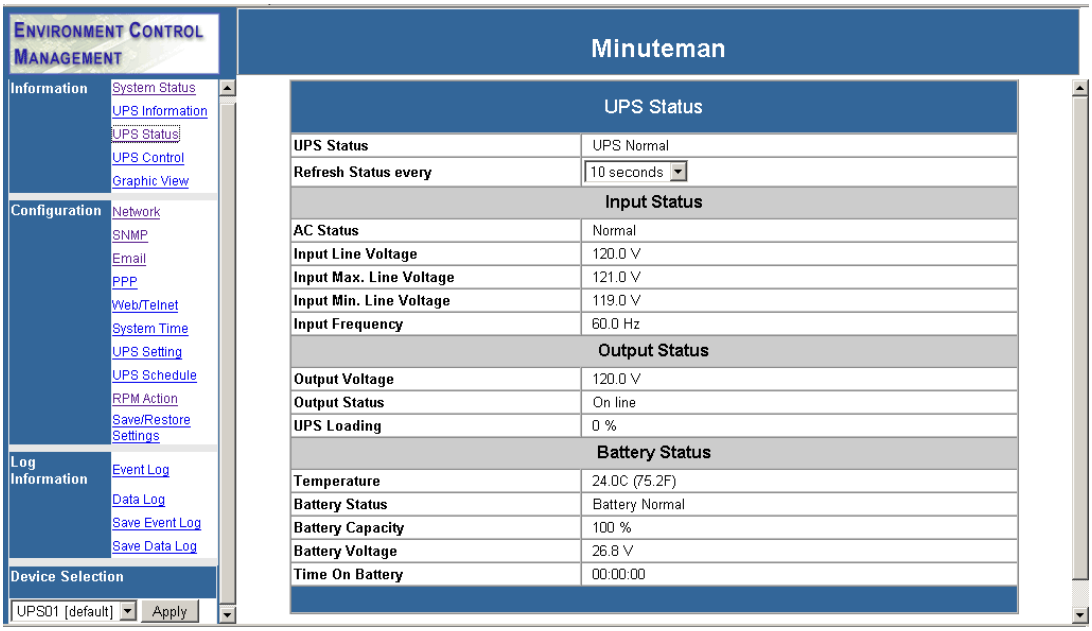
You are currently viewing the RPM Web pages. To view the UPS Web pages follow the procedure below.




1. Under “Device Selection” select UPS01 [default] and then click “Apply”.




2. The left hand side Menu items will change to show the UPS menu items. The right hand side will still show the RPM Status page. To view the UPS Web pages click on the “Refresh” button in the Web browser tool bar and then the UPS Status page will appear. See the SNMP-32L User’s Manual for more detailed information concerning the UPS Web pages.




3. This screen shows the UPS Status. See the SNMP-32L User's Manual for more detailed information concerning the UPS Web pages.
4. To return to the RPM Web pages, under "Device Selection" select RPM and then click "Apply". The left hand side Menu items will change to show the RPM menu items. The right hand side will still show the UPS Status page. To view the RPM Web pages click on the "Refresh" button in the Web browser tool bar and then the RPM Status page will appear. See the RPM User's Manual and the SNMP-32L User's Manual for more detailed information concerning the RPM Web pages.

# Obtaining Technical Assistance

For Technical Support on the Web, please visit the Support section of our Web site or visit our online Discussion Forum at www.minutemanups.com

In order to diagnose the problem you are having, our technicians need the following information from you.

**Installation Site:**

Company Name:_____

Address:_____

City:_____State:_____ZIP code:_____

Contact Person's Name:_____

Phone Number:_____

**Computer System:**

Operating System and version:_____

System Manufacturer:_____

System Model Number:_____

NMS name and revision number:_____

_____

**UPS/RPM:**

Model Name/Number:_____

Serial Number:_____

Type of option card (internal or external):_____

**What are the symptoms?**

_____

_____

_____

_____

## ☎ *Technical Support* ☎

Please have the information listed above ready when you contact us. You can reach us by calling:

**Phone**: 1-972-446-7363

**Fax:** 1-972-446-9011

# LIMITED PRODUCT WARRANTY

Para Systems Inc. (Para Systems) warrants this equipment, when properly applied and operated within specified conditions, against faulty materials or workmanship for a period of three years from the date of original purchase by the end user. For equipment sites within the United States and Canada, this warranty covers repair or replacement of defective equipment at the discretion of Para Systems. Repair will be from the nearest authorized service center. Replacement parts and warranty labor will be borne by Para Systems. For equipment located outside of the United States and Canada, Para Systems only covers faulty parts. Para Systems products repaired or replaced pursuant to this warranty shall be warranted for the remaining portion of the warranty that applies to the original product. This warranty applies only to the original purchaser who must have properly registered the product within 10 days of purchase.

The warranty shall be void if (a) the equipment is damaged by the customer, is improperly used, is subjected to an adverse operating environment, or is operated outside the limits of its electrical specifications; (b) the equipment is repaired or modified by anyone other than Para Systems or Para Systems-approved personnel; or (c) has been used in a manner contrary to the product's operating manual or other written instructions.

Any technical advice furnished before or after delivery in regard to use or application of Para Systems's equipment is furnished without charge and on the basis that it represents Para Systems's best judgment under the circumstances, but it is used at the recipient's sole risk.

EXCEPT AS PROVIDED HEREIN, PARA SYSTEMS MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Some states do not permit limitation of implied warranties; therefore, the aforesaid limitation(s) may not apply to the purchaser.

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